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REMARKS

In the Final Office Action, the Examiner noted that claims 1-21 are pending, claims 22-44 have been withdrawn from the application, claims 1-3 and 6-21 stand rejected and claims 4-5 are objected to. By this response, claim 1 has been amended, withdrawn claim 42 has been cancelled, new claim 45 has been added, and claims 2-21 continue unamended.

The Applicants thank the Examiner for interviewing with Applicants' attorney, Steven M. Hertzberg, on November 18, 2003 regarding this response to the Final Office Action. In view of the following discussion, Applicants submit that none of the claims now pending in the application are anticipated under the provisions of 35 U.S.C. §102. Thus, Applicants believe that all of these claims are now in condition for allowance.

A. Allowable Subject Matter

The Examiner has objected to claims 4 and 5 as being dependent upon a rejected base claim. The Examiner concludes that these claims would be allowable subject matter if rewritten in independent form including all the limitations of the base claim and any intervening claims.

The Applicants thank the Examiner for indicating the allowable subject matter with respect to these claims. However, in view of the amendment and arguments set forth herein, the Applicants believe base claim 1 (and all intervening claims) is in allowable form and, as such, the dependent claims 4 and 5, as they stand, are therefore in allowable condition. Therefore, the Applicants respectfully request that the foregoing objections to claims 4 and 5 be withdrawn.

I. REJECTION OF CLAIMS UNDER 35 U.S.C. §102

The Examiner rejected claims 1-3, and 6-21 as being anticipated by Shamouilian et al. (United States patent 6,151,203, issued November 21, 2000). The rejection is respectfully traversed.

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The Applicants have amended independent claim 1 to further clarify the features that the Applicants consider as being inventive. In particular, claim 1, as amended, recites:

"An electrical coupler, comprising:

an electrically conductive inner connector element having opposing ends;
an upper end connector and a lower end connector; each end connector respectively coupled to one of said opposing ends of said inner connector element;

a thermally conductive flange directly abutted against and circumscribing said inner connector; and

an electrically non-conductive outer connector element disposed over said electrically conductive inner connector and said thermally conductive flange."
(emphasis added).

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindenmann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears Roebuck & Company, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). The Shamoullian reference fails to disclose each and every element of the claimed invention, as arranged in the claim.

In particular, the Shamoullian reference discloses a thermally conductive ring 202 surrounded or embedded in a portion of the silicone second connector element 238. The thermally conductive ring 202 is provided with a plurality of holes or bores 202a, 202b, 202c for having threaded bolts extended therethrough, and for mechanically mounting the connector member 232 to the cooling plate 167. It will be understood that the metal ring 202, through the bolts residing in bores 202a-202c, mount the connector member 232 mechanically securely to the cooling plate 167, but since the metal ring 202 is surrounded by or embedded in a portion of the outer resilient silicone connector element 238, the resilient silicone connector element 238 is sufficiently deformable or

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resilient to permit sufficient relative movement between the connector member 232 and the cooling plate to facilitate insertion of the male connector member 189 (see Shamouilian, Col. 13, lines 6-35, FIGS. 5, 7, 7A, and 9). Nowhere in the Shamouilian reference is there any teaching of "a thermally conductive flange directly abutted against and circumscribing said inner connector."

Referring to Fig. 2 of the Applicants' invention, a thermally conductive flange 202 is directly abutted against (e.g., brazed) and circumscribes the electrically conductive inner connector elements 232. That is, the thermally conductive flange of the applicants' invention is directly abutted against the inner connector, as also shown in FIGS. 3A and 3B, and claimed in amended claim 1 of the Applicants' invention. Having the thermally conductive flange directly abutted against the inner connector defines a thermally conductive path from the inner connector to an environment surrounding the electrical coupler. By contrast, the Shamouilian reference discloses that the thermally conductive flange is embedded in the silicone connector element and not directly abutted against the inner connector. Thus, the ring of the Shamouilian reference does not directly interface (i.e., abut) with the inner connector.

Support for the features recited in amended claim 1 may be found in the Applicants' specification where "[r]eferring to FIGS. 3A, 3B and 4, it will be further understood that the electrical coupler 230 includes a flange 202 that is fabricated from a thermally conductive, yet electrically insulative material such as a ceramic material. Preferably, the thermally conductive flange 202 is fabricated from a material selected from the group comprising aluminum nitride (AlN) and beryllium oxide (BeO₂). The thermally conductive flange 202 circumscribes the annular cylindrical portion 196a at the upper portion 232 of the electrical coupler 230 and is attached e.g., by brazing or other thermal bonding/coupling techniques." (see Applicants' specification, page 8, lines 22-32 and FIGS. 2, 3A, 3B, and 4).

Referring to FIG. 7 and 7A of the Shamouilian reference, the ring 202 does not directly abut against the inner connector 236. Rather, the electrically non-conductive outer connector element 238 is disposed between the ring 202 and the inner connector 238. Accordingly, the ring 202 does not define a thermally conductive path from the

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inner connector to an environment surrounding the electrical coupler. Therefore, the Shamouilian reference fails to teach each and every element of the claimed invention as arranged in the claim, since there is no teaching, or even suggestion, of "a thermally conductive flange directly abutted against and circumscribing said inner connector."

As such, the Applicants submit that independent claim 1, as amended, fully satisfies the requirements of 35 U.S.C. §102 and is patentable thereunder. Furthermore, claims 2, 3, 8, 10-11, 14, 16, 18 and 21 depend, either directly or indirectly, from independent claim 1 and recite additional features thereof. As such, and for at least the same reasons set forth above, the Applicants submit that these dependent claims are not anticipated from the teachings of the reference and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Therefore, the Applicants respectfully request that the rejections be withdrawn.

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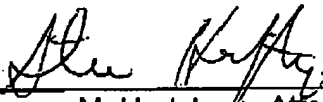
CONCLUSION

Thus, Applicants submit that none of the claims presently in the application are anticipated under the provisions of 35 U.S.C. § 102. Consequently, Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Steven M. Hertzberg, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

12/01/03


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